## AVE\_June2005 Flight Summary 9 June 2005

#### **General Information**

Flight date - 9 June 2005

Flight description - Flight 1 AVE mission

Flight duration – 3.5 hours

**Crew** – William Ehrenstrom (281-244-9755). John Bain (281-244-9661)

Instruments flown: ACAM, Argus, CAFS, CPL, CIMS, FCAS, Harvard Water Vapor, JLH, MACS, MMS, MTP,

NMASS, NOAA Ozone, PANTHER, PT, S-HIS, WAS (17)

Instruments not flown: IRIS

#### Flight Log

MMS ON	12:46	Takeoff	1:09	Begin Descent	3:40
Before Taxi	1:02	Climb/5000	1:15	Landing	4:35

#### Gear extension/retractions

Gear Up	1:09			
Gear Down	4:25			

### **Weather Observations**

On climb:

- On climb-out, we passed through a scattered cumulus laver at 3,500 ft. Above this was clear sky.
- At 58,000 ft, the sky was clear with only some haze and a scattered cumulus layer in the distance.

#### Cruise:

 At approximately 2:45 pm, the sky was clear with a widely scattered cumulus layer near the ground below us.

#### On descent:

• On decent, we passed through a scattered cumulus layer at approximately 8,000 ft. We made two or three very brief penetrations through these clouds while making the approach to Ellington.

#### Flight Profile

We flew west direct to Fort Stockton, Texas; then we turned east-southeast for Brownsville, Texas at 2:18 pm; at Brownsville, we then turned toward Ellington for the home leg. The climb became very shallow at 58,500 ft at about 2:00 pm. We reached 60,000 ft at about 2:25 pm.

The box and S-turn maneuvers were performed in the second leg of the flight. The box maneuver was initiated at 2:56 pm. The S-turn maneuver was initiated at 3:02 pm. During these maneuvers, our altitude dropped 300 to 500 ft. The S-turn was completed at about 59,300 ft. The pitch-and-yaw maneuvers were initiated soon after starting the home leg of the flight at 3:02 pm (~59,000 ft).

During the descent, we encountered a light-to-moderate chop that was prevalent all the way to near final approach.

#### **Instrument Notes**

The MTP display started to degrade as we were reaching about 57,000 ft at about 1:50 pm. First it started to look fuzzy, then jittery, then broken up, and finally it went to a black screen. I cycled the display power switch on the monitor three times, with one minute between each on or off cycle. This was unproductive; the display was left on. Soon after we started our descent at about 3:45 pm, the display recovered and was good throughout the rest of the flight.

The WAS 1 was initiated at 2:03 pm at 58,500 ft.

The S-HIS fail light came on at 3:47 pm. Since the spoilers were deployed and we were experiencing the choppy ride, I took no action.

The Harvard Water Vapor light came on at 8,800 ft on descent, as expected. No action taken. The CIMS fail light came on at 3,000 ft on descent, as expected. No action taken.

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To ftp for the nav data: IP address 128.157.138.64

Username: <a href="mailto:anonymous@wb57f.asds.net">anonymous@wb57f.asds.net</a>

Password: <any email address>
The directory is: WB57F\_Processed/AVEJUN05